

Construction Project Management

Construction Project Management

1. Introduction

- **Construction project management:** planning, coordinating, and controlling a building project from start to finish.
- It ensures delivery on time, within budget, and to required quality.

2. Project Constraints

- **Scope, time, and cost:** the classic triple constraint balanced against quality.
- Changes to one constraint usually affect the others.
- Risk and resources must also be managed throughout.

3. Project Phases

- Initiation defines objectives and feasibility.
- Planning sets schedules, budgets, and procurement strategy.
- Execution, monitoring, and closeout deliver and hand over the work.

4. Key Tools and Techniques

- Gantt charts and the critical path method schedule activities.
- Cost estimating, budgeting, and earned value track finances.
- Contracts and procurement define roles and responsibilities.

5. Roles and Success Factors

- The project manager coordinates clients, designers, and contractors.
- Clear communication and stakeholder management reduce disputes.
- Effective risk management and quality control underpin success.